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EXAMINER

WILSON, ROBERT W

ART UNIT

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<p align="center"><b>Advisory Action</b> <b>Before the Filing of an Appeal Brief</b></p>	<p><b>Application No.</b> 09/975,518</p>	<p><b>Applicant(s)</b> KAPOOR ET AL.</p>	
	<p><b>Examiner</b> ROBERT W. WILSON</p>	<p><b>Art Unit</b> 2419</p>	

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 15 July 2009 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 5 months from the mailing date of the final rejection.  
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

#### AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: \_\_\_\_\_.  
Claim(s) objected to: \_\_\_\_\_.  
Claim(s) rejected: 1-6,29-35,38-41,43 and 44.  
Claim(s) withdrawn from consideration: \_\_\_\_\_.

#### AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

#### REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See Continuation Sheet.  
12. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_.  
13. ☐ Other: \_\_\_\_\_.

/Robert W Wilson/  
Primary Examiner, Art Unit 2419

Continuation of 11. does NOT place the application in condition for allowance because: The examiner disagrees with the applicant argument that the combination of references do not teach: in a multi-point communication system having a receiver and transmitter disposed at a primary site for communication with a plurality of remote units disposed at respective secondary sites an antenna comprising: Multiple receiving elements configured to receive communication over a carrier frequency from said plurality of remote units disposed at respective secondary sites ; at least two receiving elements configured to receive the communication signals on the same frequency band during any period of time; the receiving elements being partitioned into a plurality of groups disposed remotely from one another by at least a predetermined minimum group spacing sufficient to obtain spatial diversity, Each group containing at least one receiving element at least one group including multiple receiving elements located proximal to one another and no farther than a predetermined maximum receiving element spacing to facilitate spatial filtering.

Alamouti teaches: in a multi-point communication system having a receiver and transmitter disposed at a primary site for communication with a plurality of remote units disposed at respective secondary sites an antenna (Figure 1 shows a Remote stations or units in communication with a Base station which has a TRANS or transmitter and receiver which are in a multi point configuration) comprising: Multiple receiving elements configured to receive communication over a carrier frequency from said plurality of remote units disposed at respective secondary sites (A & B per Fig 1 are elements which receive communication over F2 or carrier frequency from Remote Station U and Remote Station V which are disposed at respective secondary sites) At least two receiving elements configured to receive the communication signals on the same frequency band during any period of time (A & B per Fig 1 are receiving elements which receive F2 or communication signals on the same frequency band) Each group containing at least one receiving element (A and B contain at least one element per Fig 1) Spatial diversity (per Fig 1)

Alamouti does not expressly call for: the receiving elements being partitioned into a plurality of group disposed remotely from one another by at least a predetermined minimum group spacing sufficient to obtain spatial diversity; at least one group containing multiple elements located proximal to one another and no farther apart than a predetermined maximum receiving element spacing to facilitate spatial diversity

Paulraj teaches: the receiving elements being partitioned into a plurality of group disposed remotely from one another and at least another group containing multiple elements proximal to one another (Antenna or elements summed and weighted into d groups and each group has at least one antenna weighted per Figure 6)

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the receiving elements being partitioned into a plurality of group disposed remotely from one another Paulraj to the processing of Alamouti in order to perform spatial filtering.

The combination of Alamouti and Paulraj does not expressly call for: at least a predetermined minimum group spacing sufficient to obtain spatial diversity; at least one group containing multiple elements no farther apart than a predetermined maximum receiving element spacing to facilitate spatial diversity

Jenness teaches: disposed remotely from one another by at least a predetermined minimum group spacing sufficient to obtain spatial diversity (spacing is minimum distance in order to achieve spatial diversity per col. 1 line 63 to col. 2 line 5)

It would have been obvious to one of ordinary skill in the art at the time of the invention to add disposed remotely from one another by at least a predetermined minimum group spacing sufficient to obtain spatial diversity of Jenness to the system of the combination of Alamouti and Paulraj in order to improve signal reception in a multipath environment.

The combination of Alamouti, Paulraj, and Jenness do not expressly call for: at least one group containing multiple elements no farther apart than a predetermined maximum receiving element spacing to facilitate spatial diversity

Bell teaches: at least one group containing multiple elements no farther apart than a predetermined maximum receiving element spacing to facilitate spatial diversity (separating the elements an appropriate or maximum distance in order to achieve spatial diversity per col. 3 line 53 to col. 4 line 6)

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the at least one group containing multiple elements no farther apart than a predetermined maximum receiving element spacing to facilitate spatial diversity of Bell to the system of the combination of Alamouti, Paulraj, and Jenness in order to insure that the elements are not separated to far which will result in degradation due to multipath affects.

Next the applicant argues that combination of references do not teach: at least two receiving elements configured to receive the communication signal on a same frequency band any period of time, the receiving elements being partitioned in two groups. Alamouti teaches: at least two elements configured to receive communication signals on a same frequency band any period of time (A and B per Fig 1 are at least two elements configured to receive communication signals on a same frequency band during any period of time. A and B are two separate groups) Next the applicant argues that the combination does not expressly call for: at least one group including multiple receiving elements located proximal to one another and no farther apart than a predetermined maximum receiving element spacing to facilitate spatial filtering Bell teaches: at least one group including multiple receiving elements located proximal to one another and no farther apart than a predetermined maximum receiving element spacing to facilitate spatial filtering (separating the elements an appropriate or maximum distance in order to achieve spatial diversity per col. 3 lines 53 to col. 4 line 6)

Next the applicant goes through a piece meal analysis by describing literally what each reference Paulraj, Jennesses and Bell into a hypothetical system which applicant claims would not have "plurality of groups", "multiple receiving elements located proximal to one another and no farther apart than a predetermined maximum receiving element spacing.. The examiner previously described how all of these elements clearly fitted together into a rejection with all of the combination of reference and an appropriate motivation to combine. Next the applicant goes on to argue that the no one of ordinary skill would combine the reference to perform the claimed limitations. The examiner has explained in the above rejection how all of the limitations fit together and appropriate reason to combine. The applicant failed to produce any evidence in any of the reference why it would not be appropriate to combine the references.

Relative to claims 2 and 30 the applicant again repeats the same argument relative to why the combination of reference do not teach the claimed invention. For brevity reasons the examiner will not repeat the response which can be read above. Additionally the applicant claims that none of the reference teach: receiving element spacing no more than one half time a wavelength. Gardnet teachesL receiving element spacing no more than one half a wavelength (one half savelength per col. 6 lines 1-27)

Relative to claims 3 and 31 the applicant again repeats the same argument relative to why the combination of references do not teach the claimed invention. For brevity reasons the examiner will not repeat the response which can be read above. Additionally the applicant claims that none of the references teach: predetermined minimum spacing no more than five times a wavelength. Chang teaches: predetermined minimum spacing no more than five times a wavelength (Fig 6)

Referring to claim 35, the examiner respectfully disagrees with the applicant argument that the combination of references do not teach: an adaptive antenna array architecture for communication, the architecture comprising: a plurality of adaptive antenna arrays for signal reception, wherein the plurality of adaptive antenna arrays including a plurality of sub-arrays each subarray including at least two receiving elements the receiving elements in the sub-array being no farther apart than a predetermined maximum receiving element spacing to facilitate spatial filtering wherein the sub-arrays being spaced to obtain spatial diversity; an array fixation structure configured to position the plurality of adaptive antenna arrays; an array support structure for positioning the array fixation structure at a desired elevation and a base station configured to control the adaptive antenna array architecture.

Alamouti teaches: an adaptive antenna array architecture for communication (Figure 1 is the architecture) the architecture comprising:

A plurality of adaptive arrays for signal reception wherein the array is spaced in order to obtain spatial diversity (A, B, C, and D per Fig 1 or plurality of adaptive arrays for signal reception and they are spaced with sufficient geographic separation or spatial diversity per col. 10 line 61)

A base station configured to control the adaptive antenna array structure (Figure 1 shows a base station which controls A, B, C, and D)

The arrays are spaced for spatial diversity (sufficient geographic separation or spatial diversity per col. 10 line 61)

Alamouti does not expressly call for: wherein the plurality of antenna arrays comprise a plurality of sub-arrays, each sub-array including at least two receiving elements the receiving elements in the subarrays being no farther apart than a predetermined maximum element spacing or an array fixation structure configured to position plurality of adaptive antenna arrays at desired elevation

Paulraj teaches: elements being partitioned into a plurality of groups and each group containing at least one element at least one group including multiple elements located proximate to one another (Antenna or elements summed and weighted into d groups and each group has at least one antenna weighted per Figure 6)

It would have been obvious to one of ordinary skill in the art at the time of the invention to add elements being partitioned into a plurality of groups and each group containing at least one element at least one group including multiple elements located proximate to one another of Paulraj to the processing of Alamouti in order to perform spatial filtering.

The combination of Alamouti and Paulraj does not expressly call for: at least a predetermined minimum group spacing sufficient to obtain spatial diversity; at least one group containing multiple elements no farther apart than a predetermined maximum receiving element spacing to facilitate spatial diversity and an array fixation structure for mounting said plurality of adaptive antenna arrays at desired elevation

Jenness teaches: disposed remotely from one another by at least a predetermined minimum group spacing sufficient to obtain spatial diversity (spacing is minimum distance in order to achieve spatial diversity per col. 1 line 63 to col. 2 line 5)

It would have been obvious to one of ordinary skill in the art at the time of the invention to add disposed remotely from one another by at least a predetermined minimum group spacing sufficient to obtain spatial diversity of Jenness to the system of the combination of Alamouti and Paulraj in order to improve signal reception in a multipath environment.

The combination of Alamouti, Paulraj, and Jenness do not expressly call for: at least one group containing multiple elements no farther apart than a predetermined maximum receiving element spacing to facilitate spatial diversity and an array fixation structure for mounting said plurality of adaptive antenna arrays at desired elevation

Bell teaches: at least one group containing multiple elements no farther apart than a predetermined maximum receiving element spacing to facilitate spatial diversity (separating the elements an appropriate or maximum distance in order to achieve spatial diversity per col. 3 line 53 to col. 4 line 6)

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the at least one group containing multiple elements no farther apart than a predetermined maximum receiving element spacing to facilitate spatial diversity of Bell to the system of the combination of Alamouti, Paulraj, and Jenness in order to insure that the elements are not separated to far which will result in degradation due to multipath affects

The combination of Alamouti, Paulraj, Jenness, and Bell do not expressly call for: an array fixation structure for mounting said plurality of adaptive antenna arrays at desired elevation

Reeces teaches: An array fixation structure for mounting said plurality of adaptive antenna arrays at desired elevation (72 per Fig 6 or array fixation structure and support between 72 and light pole per Fig 6 or array support structure for position array fixation structure at desired elevation

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the array fixation structure for mounting said plurality of adaptive antenna arrays at desired elevation of Reece to the system of the combination of Almouti, Paulraj, Jenness, and Bell in order to mount the arrays in an environment that does not have a lot of space.

Next the applicant goes through a piece meal analysis by describing literally what each reference Paulraj , Jennesses and Bell into a hypothetical system which applicant claims would not have "plurality of groups" , "multiple receiving elements located proximal to one another and no farther apart than a predetermined maximum receiving element spacing.. The examiner previously described how all of these elements clearly fitted to together into a rejection with all of the combination of reference and an appropriate motivation to combine. Next the applicant goes on to argue that the no one of ordinary skill would combine the reference to perform the claimed limitations. The examiner has explained in the above rejection how all of the limitations fit together and appropriate reason to combine. The applicant failed to produce any evidence in any of the reference why it would not be appropriate to combine the references. The examiner respects applicant opinion however, applicant has a burden to provide evidence and applicant opinion is not evidence.

The examiner respectfully disagrees with the applicant argument relative to claim 38 that the combination of reference do not teach: a signal receiver for receiving communication signals the receiver comprising: an adaptive array configured to receive signals from remote units; a plurality of demodulator units configured to process the signals; a plurality of beam former for configuring to construct a desired signal response as a function of direction of arrival data of the signals ; and a spatial diversity combiner configured to remove interference from the signals.

Referring to claim 38, Paulraj teaches: signal receiver (Figure 5 or receiver using spatial filter 88 which is shown in more detail in Figure 6) the receiver comprising:

An adaptive array configured to receive signals from remote units (m sub-arrays 72, 74 ,& 76 make up the adaptive array which receive signal from Transmitters or remote units per Fig 5 and per col. 7 line 49 to col. 8 line 49)

A plurality of demodulator units configured to process the signals (There are d demodulators 98 configured to process the signals per Fig 5 and Fig 6 and per col. 7 line 49 to col. 8 line 49)

A plurality of beam formers configured to construct a desired signal response (There are D of the combination of weighting and summing or D beam formers per Fig 6 and per col. 7 line 49 to col. 8 line 49)

A spatial diversity combiner configured to remove interferences from said signal (combiner 98 per Fig 5 inherently remove interference by combining signals per col. 7 line 49 to col. 8 line 49)

Paulraj does not expressly call for: response as a function of direction of arrival data of the signals

Forssen teaches: as a function of direction of arrival data of the signals  
(18 per Fig 2 calculates the direction of arrival which is input into the weight function per col. 4 lines 38 to 57)

It would have been obvious to one of ordinary skill in the art at the time of the invention to add as a function of direction of arrival data of the signals of Forssen to the processing of Paulraj in order to improve the spatial processing which will result in improved spatial interference processing.

Referring to claim 39, the combination of Paulraj and Forssen teach the receiver of claim 38

Paulraj does not expressly call for: direction of arrival processor configured to calculate a direction of arrival for the signals

Forssen teaches: direction of arrival processor configured to calculate a direction of arrival for the signals (18 per Fig 2 and per col. 4 lines 38 to 57 or direction of arrival processor)

It would have been obvious to one of ordinary skill in the art at the time of the invention to add direction of arrival processor configured to calculate a direction of arrival for the signals of Forssen to the processing of the combination Paulraj and Forssen in order to improve the spatial processing which will result in improved spatial interference processing.

Next the applicant goes through a piece meal analysis by describing literally what each reference Paulraj , Jennesses and Bell into a hypothetical system which applicant claims would not have "plurality of groups" , "multiple receiving elements located proximal to one

another and no farther apart than a predetermined maximum receiving element spacing.. The examiner previously described how all of these elements clearly fitted to together into a rejection with all of the combination of reference and an appropriate motivation to combine. Next the applicant goes on to argue that the no one of ordinary skill would combine the reference to perform the claimed limitations. The examiner has explained in the above rejection how all of the limitations fit together and appropriate reason to combine. The applicant failed to produce any evidence in any of the reference why it would not be appropriate to combine the references. The examiner respects applicant opinion however, applicant has a burden to provide evidence and applicant opinion is not evidence.

Referring to claim 40 the applicant again argues for the same reason that claim 38 is allowable that 40 should be allowable, The examiner has already addressed these issues refer to the above for details.

The examiner respectfully disagrees with the applicant argument that the combination of references do not teach: a emthod for reducing signal interference, the method comprising assigning at least one frequency bin to a user; spacing the at least one frequency bin belonging to the user to at least one sufficiently different frequency as a function of minimizing singal strength of active gins to reduct inter-bin interference; and locating the at lest one frequency bin with at least one frequency bin of other user such that direction of arrival for the user are distinctly separable

Referring to claim 41, Ward teaches: a method for reducing signal interference (method described per col. 8 lines 1 to 50) the method comprising:

Assigning at least one frequency bin to a user (Assign carrier frequency f1 to MS1 or user while in B7 per col. 8 lines 1 to 50)

spacing the at least one frequency bin belonging to the user to at least one sufficiently different frequency to reduce inter-bin interference (MS1 moves to B6 and another frequency carrier or frequency bin is assigned which is available because no inherent inter-bin interference is present. This occurs because communication over F1 is B6 was lost per col. 8 lines 1 to 50)

locating the at least one frequency bin with at least one frequency bin to other users such that direction of arrival for said user are distinctly separable ( Other inherent users are present because the allocation of carrier frequency is based upon frequencies which are underutilized which implies other users are using these carrier frequencies per col. 8 lines 1 to 50)

Ward does not expressly call for: at least one sufficiently different frequency as a function of minimizing signal strength of active bins to reduce inter-bin interference

Langlais teaches: at least one sufficiently different frequency as a function of minimizing signal strength of active bins to reduce inter-bin interference (tones spaced at a given frequency spacing which allows for the tones to be present for a longer period of time or increasing signal strength which reduces inter symbol or inter-bin interference per col. 4 lines 50 to 61)

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the at least one sufficiently different frequency as a function of minimizing signal strength of active bins to reduce inter-bin interference of Langlais to the processing of Ward in order to minimize interference.

Next the applicant goes through a piece meal analysis by describing literally what each reference Ward and Langlais into a hypothetical system which applicant claims would not have "the at least one of frequency bin belonging to the user to at least one sufficiently different frequency as a functon of minimizing signal strehgth of active bins to reduct inter-bin interference. The examiner previously described how all of these elements clearly fitted to together into a rejection with all of the combination of reference and an appropriate motivation to combine.

Next the applicant goes on to argue that the no one of ordinary skill would combine the reference to perform the claimed limitations. The examiner has explained in the above rejection how all of the limitations fit together and appropriate reason to combine. The applicant failed to produce any evidence in any of the reference why it would not be appropriate to combine the references. The examiner respects applicant opinion however, applicant has a burden to provide evidence and applicant opinion is not evidence.

The examiner respectfully disagrees with the applicant argument relative to claim 43 that the Ward does not teach: a method of avoiding interference in commuicaiont signals the method comprising: partition available bandwidht into a plurlaity of frequency blocks the frequency blocks including a plurality of gins; assigning a user to a bin in each of the frequency blocks and distribuit the bins within the frequency blocks as a function of the power in the bins.

Referring to claim 43, Ward teaches: a method (Figure 2 performs the method) for allocating communication bandwidth; the method comprising:

The background embodiment teaches: determining the first direction of a signal arrival for a first remote user and a second direction for a second remote user (a plurality of mobiles movement are tracked which would include a first and second mobile user using a narrow angular beam which allows for determination of direction per col. 2 lines 1 to 650)

The background embodiment does not expressly call for: assigning the first remote user to a first frequency bin and assigning the second remote user to a second frequency bin based at least in part on the direction of signal arrival such that direction of signal arrival for adjacent frequency bins differs

Another embodiment teaches: assigning the first remote user to a first frequency bin and assigning the second remote user to a second

frequency bin based at least in part on the direction of signal arrival such that direction of signal arrival for adjacent frequency bins differs (An assignment of a first inherent remote user is made to B1 with f20. Another or second remote user in B3 is assigned an available frequency which does not include f20 because of interference per col. 11 line 43 to col. 14 line 44)

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the assigning said first remote user to a first frequency bin and assigning said second remote user to a second frequency bin based at least in part on said direction of signal arrival such that direction of signal arrival for adjacent frequency bins differs of another embodiment of Ward to the tracking system of the background embodiment of Ward in order to provide frequency allocation which improves the overall system by making more effective utilization of bandwidth which results in a performance improvement.

The examiner respectfully disagrees with the applicant argument relative to claim 44 that the combination of reference do not teach: a method of avoiding interference in communication signals the method comprising: partition available bandwidth into a plurality of frequency blocks the frequency blocks including a plurality of bins; assigning a user to a bin in each of the frequency blocks and distribute the bins within the frequency blocks as a function of the power in the bins.

Referring to claim 44, Ward teaches: a method (Figure 10 performs the method) for avoiding interference in communication signals said method comprising:

Partitioning available bandwidth into a plurality of frequency blocks said frequency blocks comprising a plurality of bins (Bandwidth is divided into carrier frequencies of frequency blocks and each carrier frequency has time slots or bins per col. 10 line 37 to col. 11 line 42)

Assigning a user to a bin in each of said frequency blocks (Carrier frequencies are assigned to users randomly. Slots are assigned based upon availability so a user can be assigned to a first carrier frequency with a slot and a second carrier frequency and another slot per col. 10 line 37 to col. 11 line 42)

Using signal power information to distribute said bins within said frequency blocks (The time slot or bins and carrier frequencies or blocks are available because no signals have been assigned; therefore signal power is used to as a distribution mechanism per col. 10 line 37 to col. 11 line 42)

Ward does not expressly call for: distributing the bins within the frequency blocks as a function of power of the bins.

Langlais teaches: distributing the bins within the frequency blocks as a function of power of the bins (tones or bins are spaced at a given frequency spacing which allows for the tones to be present for a longer period of time or increasing signal strength which reduces inter symbol or inter-bin interference per col. 4 lines 50 to 61)

It would have been obvious to one of ordinary skill in the art at the time of the invention to add distributing the bins within the frequency blocks as a function of power of the bins of Langlais to the processing of Ward in order to minimize interference.

Next the applicant goes through a piece meal analysis by describing literally what each reference Ward and Langlais into a hypothetical system which applicant claims would not have "prevented intersymbol interference but without employing a combiner that distributes the bins within the frequency blocks as a function of power. The examiner previously described how all of these elements clearly fitted together into a rejection with all of the combination of reference and an appropriate motivation to combine.

Next the applicant goes on to argue that the no one of ordinary skill would combine the reference to perform the claimed limitations. The examiner has explained in the above rejection how all of the limitations fit together and appropriate reason to combine. The applicant failed to produce any evidence in any of the reference why it would not be appropriate to combine the references. The examiner respects applicant opinion however, applicant has a burden to provide evidence and applicant opinion is not evidence.